

by a blackish line, and above by a small pale yellowish indistinctly grey-marginal spot, faintly produced into cilia above apex; a minute round black apical dot; cilia white, with a grey projecting line above apex, besides the lines in costal cilia. Hindwings and cilia white.

The absence of any oblique yellowish costal spot readily separates this insect from the European species, which in other respects it closely resembles.

Four specimens beaten from bush, at Warragul in Gippsland, Victoria, in September, and at about 2,000 feet up Mount Wellington, Tasmania, early in February.

---

NOTE ON A REPUTED POISONOUS FLY OF NEW CALEDONIA.

BY WILLIAM MACLEAY, F.L.S., &c.

Some weeks ago I received a communication from Mr. E. L. Layard, C.M.G., H.B.M. Consul New Caledonia, on the subject of a "Fly," said to be destructive to human life in that Country. Mr. Layard writes as follows :

"After my arrival here my attention was early attracted by several terrible deaths, said to be caused by a fly, which was called the "Mouche Charbonneuse" (poisonous or pestilential fly.) I tried to find out what this fly could be, but received the most contradictory answers to my enquiries. Some said it was a "Blow Fly," ("Blue Bottle"—or rather "*Green Bottle*," for I never saw a *Blue* one here)—others, that it was a common house fly; others again said that it was a special species, but all agreed that the deaths originated from the introduction into the blood of the victim of putrid matter, upon which the fly had been feeding.

"This opened another question: How was the poison introduced into the human body? Did the fly *puncture* the flesh, or did it seek a wound, or abrasion through which to introduce it?

If the former mode were adopted, it would not be a common fly, or a "Bottle," green or blue. If the latter, any fly could communicate the virus.

"A very sad death occurred, that of a worthy butcher, he was bitten or stung—or whatever the wound was—under the ear, and died in awful agony in a few hours. He received the virus from a fly at his own slaughter house, where it was supposed to have been feeding on some putrid garbage.

"The Colonial Government in a blind panic published an "Arrêté," (Ordinance), commanding under pain of fine or imprisonment, or both, that every land-owner should instantly bury or burn, not only every carcase but every bone on his property. It was in vain I pointed out to the officials that this could be made an engine of official oppression, or private spite, to an alarming extent, and quite inconsistent with "the liberty of the subject." \* \* \* \* Unfortunately the first victim of the "Arrêté" was a cranky half-mad Englishman—a large landed proprietor. You must here understand that the French Gendarmerie is a peculiar corps. The members are "Sworn to the truth" when first appointed. This oath serves them for ever. If a member makes a "process verbal" against you, you are deemed guilty, unless you can prove you are innocent. You may never have the power of crossquestioning your accuser, he may be a hundred miles away, but you must prove you are not guilty.

"A Gendarme found a dead bullock in the forest, on the land of my cranky countryman. He ordered it to be burned, saw it done, and the fragments buried by the native servants of the landowner—so far so good; but, weeks after, the Englishman impounded the Gendarme's goats for a trespass on his garden. Unhappy man! the Gendarme found on the ground at the place of incremation, a dry bone of the defunct ox. The landowner says he dug it up. A "process verbal" was immediately made, and my cranky countryman, suffering judgment to go by default,

was sentenced to some weeks imprisonment." \* \* \* \* \*  
"It was with great difficulty," Mr. Layard adds, "that the liberation of this unfortunate man was effected." \* \* \*  
He goes on to say, "But to return, what was the fly that caused all this panic, trouble, and death? No one could tell me with certainty, but the majority of my evidence pointed to a common house fly (*Musca*).

"One day sitting in my verandah reading, I was suddenly stung with such violence in the hand, that I dropt my book, and sprang from my seat with the agony. \* \* \* And I was for the moment horror struck at perceiving that my assailant was apparently a common house fly. The "Mouche Charbonneuse" I thought, at last, and I remembered with dismay the bodies of certain birds I had skinned and then hurled into the bushes. There was a bleeding puncture in my hand, which I applied to my mouth and sucked with as fervent a zeal as did Queen Eleanor, the poisoned wound of her husband King Edward. I watched my wound for some days anxiously, but no evil came of it. A second time I was stung, and there was no mistaking the fiery pain of the puncture. I tried to catch the stabber, but failed, though the opportunity gave me time to observe the fly. It was generally like a house fly, but I knew it could not be one, as no fly's sucker could thus pierce the skin.

"A third time I felt the stab, it was now on my foot, and through my stocking. As I had come off scot-free from poison twice, I let mine enemy drive his dagger in without flinching, while my son, to whom I had called, brought me the butterfly net, and I soon had the villian in my toils. I send him to you, by the hands of my son, in a glass tube, hoping that some of our members may be able to tell us what he is."

The fly is a *Stomoxys*, an insect not uncommon in this country, and very probably introduced as Mr. Layard suggests into New Caledonia and the Isle of Pines from Australia, as the maggot of

the fly lives in horse dung. The bite of this fly is, as stated by Mr. Layard, intensely sharp and stinging, but I have never known any bad effects to follow. I think it very likely that the fatal cases mentioned by Mr. Layard were not due at all to the instrumentality of this fly, but to some of the many *Muscidæ*, who are peculiarly attracted by dead bodies.

The case of the butcher in Noumea, is evidently one of malignant pustule, caused by a fly settling on a spot where the skin was slightly abraded, after feasting upon the carcase of an animal, not in a putrid state, for that would be comparatively innocuous, but freshly dead from "Charbon," "Anthrax," "Splenic Fever," or "Cumberland Disease,"—all names for one and the same disease. Under the last name the disease is well known in New South Wales, and many fatal cases of malignant pustule in human beings have occurred from time to time from it, and I believe in all or nearly all of them the disease was traced to flies carrying the poison from dead cattle. The Government of New Caledonia, in their praiseworthy efforts to prevent the spread of infection as mentioned in Mr. Layard's letter, erred seriously in allowing the option of burying or burning the dead cattle. There is no safety except in burning. *Bacillus anthracis*, the organism which is the cause of the disease, is most tenacious of life; it has been known to retain its vitality in dried bones and skins for years, and M. Pasteur has lately proved that even where a carcase has been buried to a depth of 12 feet, the *Bacilli* will in course of years find their way to the surface in the bodies of earth worms, and that they are then as capable as ever of propagating the disease.

---

NOTES AND EXHIBITS.

Mr. Brazier exhibited Part 4 of the French Journal of Conchology for 1881, with Plate 12 showing a splendid figure of